CLAIMS

1. A method comprising:

calculating a plurality of format metric values based on a coding rate for a plurality of calculated Viterbi metric values;

comparing the calculated format metrics; and

based on the comparison, determining a probable transmitted format from the set of possible formats.

2. The method of claim 1, comprising determining a plurality of possible data bit values for a transmitted data block with an unknown transmission format.

3. The method of claim 1, comprising identifying a set of possible format parameters from a transmitted data block header.

4. The method of claim 1, comprising using a probable transmitted format to decode a transmitted block of data.

5. The method of claim 1, comprising determining the highest format metric calculated.

6. The method of claim 1, comprising calculating a format metric for a possible bit value using a function:

$$FormatMetric = \frac{ViterbiMetric^2}{2\sigma^2 N} - N \cdot \ln(2) / CodingRate$$

wherein ViterbiMetric^2 is a squared Viterbi metric value for a format parameter, N is the number of assumed transmitted bits corresponding to a format, Sigma^2 (σ^2) represents the noise variance of the received block, and CodingRate represents the known encoding rate used for transmission for the received block.

7. A method comprising:

calculating a plurality of Viterbi metric values for a plurality of possible format parameters;

calculating a format metric for said possible format parameters, using the respective calculated Viterbi metric values and a decision level variable; and

determining a probable transmitted format by comparing the calculated format metrics for the possible format parameters.

8. The method of claim 7, comprising:

assuming a probable transmission format based on the lowest metric calculated.

9. The method of claim 7, comprising basing said decision level variable on an amplitude value.

10. The method of claim 7, comprising basing said decision level variable on a noise standard deviation.

11. The method of claim 7, comprising basing said decision level variable on the difference between the number of bits for various possible formats.

12. The method of claim 7, comprising calculating a format metric for a possible bit value using a function:

$$FormatMetric = DecisionLevel * N - ViterbiMetric$$

wherein DecisionLevel is a number based on characteristics of a received packet, N is a format parameter, and ViterbiMetric is the Viterbi metric.

13. A device comprising:

a processor to calculate a plurality of Viterbi metric values for a set of possible format parameters for a received block, to calculate a set of format metrics for said possible format parameters, to compare the calculated format metric values, and, based on the comparison, to determine a probable transmitted format from the set of possible formats.

14. The device of claim 13, wherein the processor is to determine a plurality of possible format parameter values for said received packet.

15. The device of claim 13, wherein the processor is to use the probable transmitted format to decode said received packet.

16. The device of claim 13, wherein the processor is to determine the highest format metric calculated.

17. The device of claim 13, wherein the processor is to calculate a format metric for a possible format parameter using a function:

$$FormatMetric = \frac{ViterbiMetric^2}{2\sigma^2 N} - N \cdot \ln(2) / CodingRate$$

wherein ViterbiMetric^2 is the squared Viterbi metric value for the format parameter, N is the number of assumed transmitted bits corresponding to a format, Sigma^2 (σ^2) represents the noise variance of a received block, and CodingRate represents the known encoding rate used for transmission for the received block.

18. A device comprising:

a processor to calculate a plurality of Viterbi metric values for a plurality of possible format parameters; to calculate a format metric for said possible format parameters using the calculated Viterbi metric values and a decision level variable; and to determine a probable transmitted format by comparing the calculated format metrics for the possible format parameters.

19. The device of claim 18, wherein the processor is to assume a probable transmission format based on the lowest metric calculated.

20. The device of claim 18, wherein the processor is to base said decision level variable on an amplitude value.

21. The device of claim 18, wherein the processor is to base said decision level variable on noise standard deviation.

22. The device of claim 18, wherein the processor is to base said decision level variable on the difference between the number of bits for various possible formats.

23. The device of claim 18, wherein the processor is to calculate a format metric for a possible format parameter using a function:

$$FormatMetric = DecisionLevel * N - ViterbiMetric$$

wherein DecisionLevel is a number based on characteristics of a received packet, N is a format parameter, and ViterbiMetric is the Viterbi metric.

24. A device comprising:

a dipole antenna; and

a processor to calculate a plurality of Viterbi metric values for a plurality of possible format parameters for a transmission format, to calculate a set of format metrics for said calculated Viterbi metrics, to compare the calculated format metrics, and, based on the comparison, to determine a probable transmitted format from the set of possible formats.

25. The device of claim 24, wherein the processor is to determine a plurality of possible data bit values for a transmitted data block with an unknown transmission format.

26. The device of claim 24, wherein the processor is to use a probable transmitted format to decode a transmitted block of data.

27. An article comprising a storage medium having stored thereon instructions that, when executed by a processing platform, result in:

the calculating of a plurality of Viterbi metric values for a plurality of possible format parameters for a transmission format;

the calculating of a set of format metric values for said calculated Viterbi metrics;

the comparing of the calculated format metric values; and

based on the comparison, the determining of a probable transmitted format from the set of possible formats.

28. The article of claim 27, wherein the instructions, when executed by a processing platform, result in using a probable transmitted format to decode a transmitted block of data.

29. The article of claim 27, wherein the instructions, when executed by a processing platform, result in determining the highest format metric calculated.